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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/625,359	07/25/2000	Hideo Abe	194917US2	6735

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ALEXANDRIA, VA 22314

EXAMINER

BEAUCHAINE, MARK J

ART UNIT	PAPER NUMBER
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3653

DATE MAILED: 08/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/625,359

Applicant(s)

ABE ET AL.

Examiner

Mark J. Beauchaine

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) 10-15 and 35-41 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19, 20 and 22-25 is/are allowed.
- 6) ☒ Claim(s) 1-9, 16, 18, 21, 26-34, 42 and 44 is/are rejected.
- 7) ☒ Claim(s) 17, 18 and 43 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 July 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Inventorship***

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

### ***Election/Restrictions***

Applicant's election with traverse of Invention I in Paper No. 7 is acknowledged. The traversal is on the grounds that section 803 of the M.P.E.P. states in part that "[i]f the search *and examination* of an entire application can be made without serious burden, the Examiner must examine it . . ." (emphasis added), and that the "claims of the present invention would appear to be part of an overlapping search area."

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This is not found persuasive because the searching of prior art in particular search areas is only a portion of the burden of examination. The claims of the instant application incorporate a variety of claim elements and configurations of said elements. Each configuration must be evaluated on its own merits and could conceivably require prior art searches in disparate areas that are unique to that particular configuration. If section 803 of the M.P.E.P. were to be interpreted as to preclude restriction simply because the Applicant's interlacing of invention elements caused certain search areas to overlap one another, the number of interlaced claim elements, and resulting configurations, of a particular application could conceivably be limitless.

The requirement is still deemed proper and is therefore made FINAL.

Claims 10-15 and 35-41 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

### ***Specification***

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4, 6, 18, 19 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**Antecedent Basis**

Claims 6 and 21 recite the following limitations:

Claim 6; "reject discrimination conveyance region" in line 3,

Claim 18; "rear opening guide arm mechanism" in the second line of the claim (it appears that the Applicant intended for claim 18 to depend from claim 17 in lieu of claim 16), and

Claim 21; "rear opening guide arm mechanism" in line 4.

There are insufficient antecedent bases for these limitations in the claims.

**Ambiguous Language**

Claims 4, 6, 18 and 19 and contain the following ambiguous language:

Claim 4; "kind identification sensor" in lines 5 and 8 (the term "paper kind identification sensor" or similar language would be acceptable),

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Claim 6; "out of identification" in line 4 (the term "not identified" or similar language would be acceptable),

Claim 18; "two-foldable" in line 1 of page 111 (the term "two-jointed" or similar language would be acceptable), and

"counter body to be detachably." in lines 4 and 5 of page 111 (the term "counter body." or similar language would be acceptable), and

Claim 19; "counter body in an installed state thereof." in the last two lines of the claim (the term "counter body." or similar language would be acceptable).

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patent Number 4,653,647 by Hashimoto (hereinafter Hashimoto) in view of Patent Number 5,402,895 by Mikkelsen et al (hereinafter Mikkelsen). The sorting apparatus disclosed by Hashimoto incorporates feeding section 4, transport section 10, note inspection section 11 and second pocket 6 (see Figure 2) that read on the Applicant's hopper, paper conveyance unit, paper identification unit and stacker, respectively.

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Although the lower U-shaped section of the transport section 10 of Hashimoto is depicted schematically, Mikkelsen clearly teaches a currency transport section of a bill processing apparatus. Said transport section incorporates a U-shaped portion comprising rollers 56 and guide 68 (see Figure 1). Accordingly, it is clear to one of ordinary skill in the art that the schematic transport section 10 of Hashimoto could be defined in terms of the U-shaped portion of Mikkelsen.

Regarding claim 5, the rollers 56 and guide 68 of Mikkelsen read on the Applicant's drive roller and guide plate, respectively.

Regarding claim 7, the facing sensors 100 and gating roller 72 of Mikkelsen read on the Applicant's gate timing sensor and switching gate, respectively.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto in view of Mikkelsen as applied to claims 1-9 and 42 above, and further in view of Patent Number US 6, 256,407 B1 by Mennie et al (hereinafter Mennie). Neither Hashimoto nor Mikkelsen disclose a pivotally mounted opening mechanism on the apparatus body. However, the use of such a mechanism to allow an operator access to the body interior is well known in the art. Mennie teaches a pivoting access door (see phantom line in Figure 3b) that reads on the Applicant's opening mechanism. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the access door of Mennie into the sorting apparatus of Hashimoto to provide a means of access into the apparatus body.

Claims 26-34 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto in view of Mikkelsen as applied to claims 1-9 and 42 above, and further in view of Patent Number 5,465,821 by Akioka (hereinafter Akioka). Neither Hashimoto nor Mikkelsen disclose a line sensor comprising a series of light emitters and opposing light receivers. However, such a line sensor configuration is well known in the art. Akioka teaches a sheet discriminating apparatus that incorporates a series of light receiving sensors 12-1 thru 12-29 (see Figure 2) opposite a series of light emitting elements 10-1 thru 10-29 (see Figure 4). Said light receivers and emitters read on the light receiver side and light emission side, respectively, of the Applicant's line sensor. Accordingly, it would have been obvious to one of ordinary skill in the art to incorporate the line sensor of Akioka into the sorting apparatus of Hashimoto to provide and effective document scanning means.

#### ***Allowable Subject Matter***

Claims 19, 20 and 22-25 are allowed. Claims 17, 18 and 43 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.



### ***Conclusion***

The following related art made of record and not relied upon is considered pertinent to applicant's disclosure:

Patent Number US 6,438,262 B1 by Bernardini et al because of its sensor pairs 10,12-15,

Patent Number 6,125,195 by Ohya et al because of its sensor means 20-26,

Patent Number 5,550,929 by Bianco because of its base member 50,

Patent Number 5,394,992 by Winkler because of its rollers 62, and

Patent Number 4,830,742 by Takesako because of its bill judging section 32.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark J. Beauchaine whose telephone number is (703)308-6336. The examiner can normally be reached on 8:00AM through 5:00PM Mondays through Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald P. Walsh can be reached on (703)306-4173. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9326 for regular communications and (703)872-9327 for After Final communications.

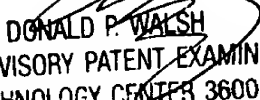
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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-1113.

mjb  
August 21, 2003

  
DONALD P. WALSH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600